ALPHA

PAL8045 with MTGH-SPL80S
Installation Guide

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X001ZF22

ALPHA HeatSink Installation Guide

Model PAL8045 with MTGH-SPL80S

For Athlon, Duron, Athlon XP/MP (Socket A) Optional Hardware Mounting Kit. The 4 Holes Surrounding The Socket Are Required

Utilizes the four holes surrounding the processor socket. Hardware may interfere with surface mount components on some motherboards. All hardware included with MTGH-SPL80S(metric) differs from the hardware included with the MTGH80S(inch.) kit for the original PAL8045. Do not mix hardware components from these two hardware kits.

Please verify that all parts are contained in the MTGH-SPL80S per the following matrix.

PARTS	QTY
SCREW M3 x 35	4
SPRING OD 6 x 25	4
NYLON WASHER	4
NYLON SHOULDER WASHER	8
SUS STAND OFF	4
POLYCARBONATE NUT (CLEAR)	4
FLUNGE NUT M3 (GOLD)	4

Remarks
Those parts that are not listed in the matrix, but used in this installation guide, are included in PAL8045.

STEP 1 Uninstall MB.

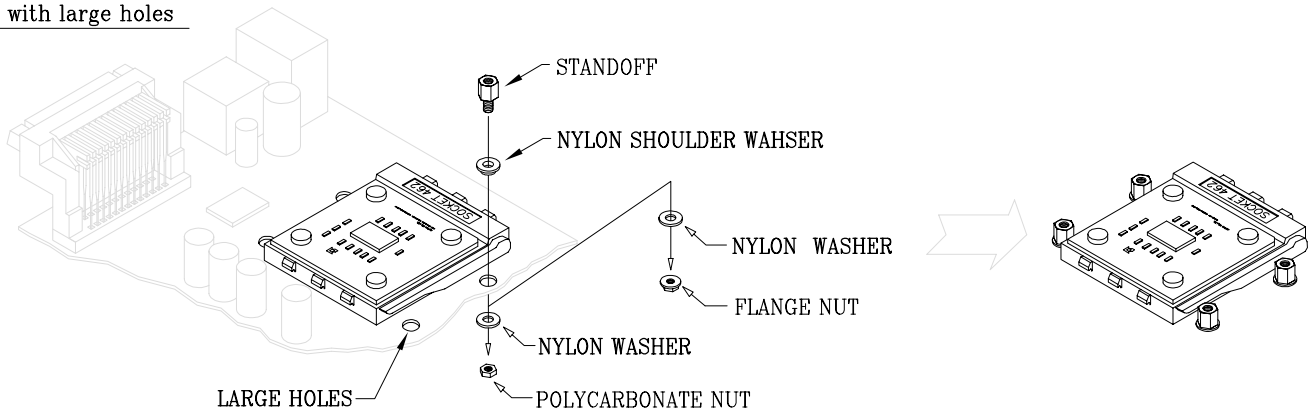
The MB must be uninstalled from the case prior to assembly of the PAL8045.

STEP 2 Install Standoffs in MB.

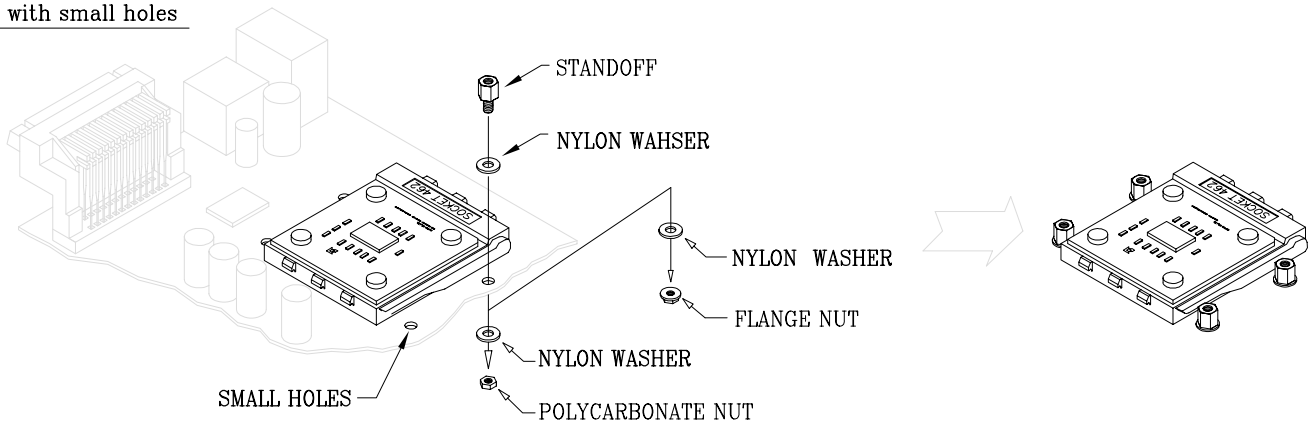
First, determine which type of standoff washer to use. If your MB has four large holes, diameter of 5.8 mm, use nylon shoulder washers. The bottom shank of the shoulder wahser will fit into the four holes surrounding processor socket. If your MB uses four small holes, use the nylon falt washer. The bottom shank of the shoulder washer will not fit into the samll holes. DO NOT use the nylon shoulder washers on boards with the small holes. This could prevent the heat sink from making contact with the processor.

Install the four nylon washers over the 4 holes in the MB. Insert the Standoffs through the nylon wahser and MB. Secure the stand offs with flange-nut/nylon washer on backside of the MB. Keep the standoff and nylon washer centered over the MB holes. Some boards have components mounted close to the holes on the backside of the board. If this is the case, use polycarbonate nuts nuts/nylon washers. If you use the metal flange-nut, make sure no components interfere with metal flange-nuts. If the wrong nut is used, your board could short out. If you are unsure, use the polycarbonate nuts. In either case, do not overtighten the nuts.

M B with large holes

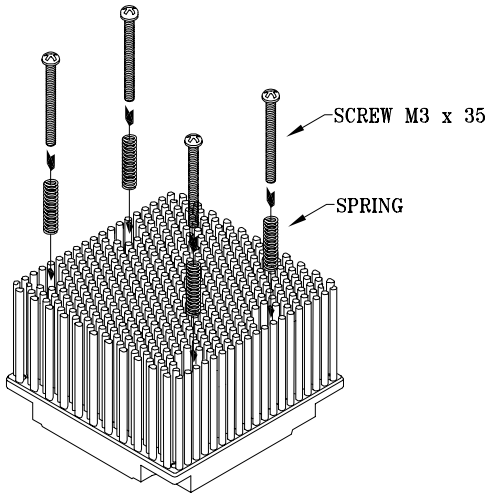


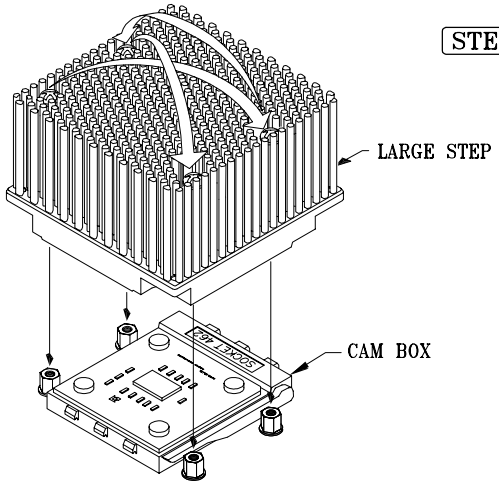
M B with small holes



STEP 3 Assemble and install Spring Screws.

Place the springs over the spring screws.
Insert the assembled spring screws through the 4 holes in the heat sink.





STEP 4 Install Heat Sink.

Apply a thin layer of thermal grease on the processor. Gently place heat sink on top of processor. Ensure that the large machined step in the base goes over the socket cam box. Line up the spring screws with the standoffs.

Begin to tighten the screws in an alternating crisscross pattern. Only tighten each screw a few turns each time and continue the crisscross pattern. Once the screws bottom, stop. The springs are now applying the specified load. Over-tightening the screws will accomplish nothing.

The heat sink should now be securely installed in the MB. If you wish, you can reinstall the MB in the case at this time or complete the heat sink assembly.

Due to the tolerances of the chip, socket, motherboard and mounting hardware, the amount of force exerted by the springs may be too weak in some cases. This can affect the performance of the heat sink.

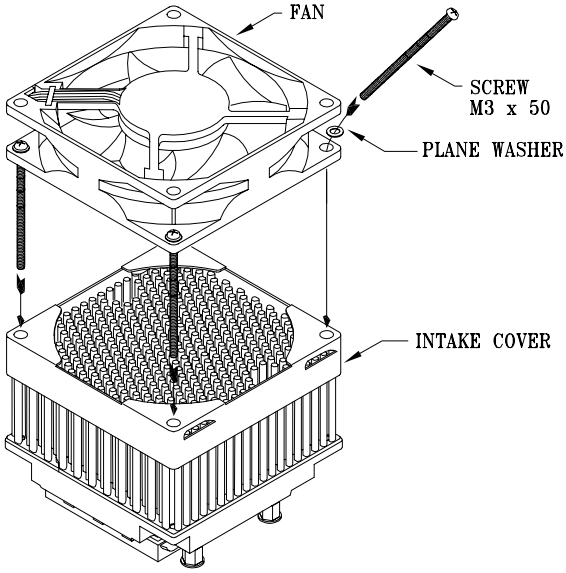
If you feel that the amount of spring force is too light and affecting the performance, add one additional spring washer per screw, between the screw head and spring.

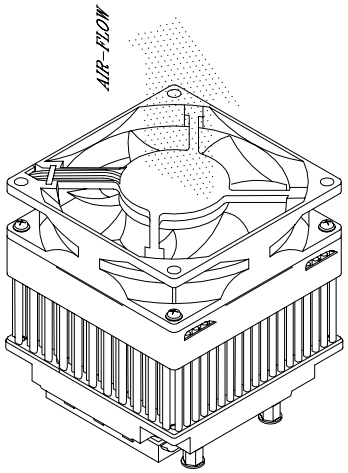
STEP 5 Heat Sink Assembly.

Please peel off the white sheet from intake cover. This cover prevents damage during manufacturing.

Place the intake-cover over the heat sink. As shown in the right-hand side figure, insert screws through in the fan's hole.

Place the fan on top of the intake cover, and tighten into the threaded holes in the heat sink base.





STEP 6 Final assembly and inspection:

Install fan cable to the motherboard connector. The PAL8045 should now be fully assembled. Inspect to ensure that the heat sink is not interfering with any components on the MB.

Reinstall the MB into the case if this was not already done. Inspect to ensure that the heat sink is sitting level relative to the processor and socket. Inspect final assembly to ensure that the heat sink assembly is not interfering with any part of the MB or case.

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